

Discussion Group P05: Centrifugal Pump Operation, Maintenance, and Reliability

Leaders:

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Suggested Topics:

1. Seal plan which was not expected – wrong for the application
2. Preventive/predictive technologies
3. Off design operation
4. Mean time between failure – how do we measure, and how do we use the metrics
5. How to create pump reliability in an unreliable plant
6. Seal-less versus sealed pump reliability, canned motor pumps versus mag drive pump reliability
7. Mechanical Integrity Inspections of VS 6 pumps in hydrocarbon service
8. Seals in light hydrocarbon service – operations, risk, leak response, maintenance
9. Pump predictive/preventive maintenance program elements 3.
10. Measures of effectiveness of preventive and predictive programs for pumps
11. Roles of operations and maintenance/reliability in improvements and data collection
12. Reliability experience with liquid versus non contacting gas seals applications
13. Maintenance philosophy for pumps
14. Spare parts – OEM versus non-OEM
15. Repairs – OEM versus non-OEM service facilities
16. Pump foundation, alignment and pipe strain influence of reliability
17. Impact of corporate purchasing alliances on pump reliability
 - a. Repair facilities alliances
 - b. New equipment purchasing alliances
18. Repair techniques and material improvements

19. Portable and on-line monitoring – impact on reliability
20. Wireless monitoring – impact on reliability and risk of failure
21. Optimization of thrust bearings configuration
22. Lubrication system impact on reliability – oil mist versus flood, oil selection
23. Mechanical Seals